

NORTH COAST RESOURCE PARTNERSHIP 2015 IRWM Project Application

The North Coast Resource Partnership (NCRP) 2015 Project Application Instructions and additional information can be found at the NCRP 2015 Project Solicitation webpage. Please fill out grey text boxes and select all the check boxes that apply to your project. Application responses should be clear, brief and succinct. Character limits are provided and include spaces. It is important to save the application file with a distinct file name that references the project name. When the application is complete, please email to kgledhill@westcoastwatershed.com

Project Applications will be accepted until 5:00 pm, May 29, 2015. The project solicitation will be closed after this date/time and edits to project applications and new applications will no longer be accepted. **If you have questions, need additional information or assistance please contact Katherine Gledhill at kgledhill@westcoastwatershed.com or 707.795.1235.**

Project Name: Caspar Water Project

A. Organization Information

1. Organization Name: Caspar Community

2. Contact Name/Title

Name: Michael Potts

Title: Water Project Facilitator Email: michael@casparinstitute.org

Phone Number (include area code): 707-964-1844

3. Organization Address (City, County, State, Zip Code):

15051 Caspar Rd., Box 84, Caspar 95420

Organization Type			
	Public Agency		
	Nonprofit Organization		
	Tribe		
	Other:		
	Organ		

5.	Authorized Representative (if different from the contact name) Name: Title: Email:
	Phone Number (include area code) :
6.	Has your organization implemented similar projects in the past? yes no Briefly describe these previous projects. An off-the-highway village between two larger tourist destinations (Fort Bragg and Mendocino) Caspar began working to build consensus and neighborliness in 1991. Caspar Community, a nonprofit entity, was instrumental in preserving Caspar Beach & Headlands State Parks, shaping planning decisions along the coast, forming conservation partnerships with similar villages (Westport, Albion), and acquiring, renovating, and expanding its Community Center to serve the entire Mendocino coastal community.
7.	List all projects your organization is submitting to the North Coast Resource Partnership for the 2015 Project Solicitation in order of priority. Caspar Community Water Project
8.	Organization Information Notes: Caspar Community (CC) is a 501(c)3 governed by a volunteer Board of Directors, dedicated to the maintenance and improvement of quality of all life in our small edge community while welcoming coastal residents and visitors from afar to our shared bit of spectacular Northern California coastline. CC has built a solid relationship with the Trust for Public Land and the USDA, who have helped us finance our notable successes. Operations are sustained by a program of monthly Fourth Sunday Breakfasts and Second Friday Open Mic Pub Nights, and the annual CasparFest. CC maintains an active website at CasparCommons.org. CC acquired the old Caspar Schoolhouse in 2001, and added a community-serving, commercial kitchen in 2012. CC continues to convene neighbors in the spirit of inclusiveness to further its mission: "To preserve and enhance the quality of all life in Caspar."
	B. Eligibility
1.	North Coast Resource Partnership and North Coast Integrated Regional Water Management Objectives [for more information see the North Coast Integrated Regional Water Management Plan] Check any of the following that apply to your project:
	GOAL 1: INTRAREGIONAL COOPERATION & ADAPTIVE MANAGEMENT Objective 1 - Respect local autonomy and local knowledge in Plan and project development and implementation Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCIRWMP project implementation
	GOAL 2: ECONOMIC VITALITY Objective 3 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities. Objective 4 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas

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GOAL 3: ECOSYSTEM CONSERVATION AND ENHANCEMENT Objective 5 — Conserve, enhance, and restore watersheds and aquatic ecosystems, including function habitats, and elements that support biological diversity Objective 6 - Enhance salmonid populations by conserving, enhancing, and restoring required habitated and watershed processes	
GOAL 4: BENEFICIAL USES OF WATER Objective 7 - Ensure water supply reliability and quality for municipal, domestic, agricultural, cultural and recreational uses while minimizing impacts to sensitive resources Objective 8 - Improve drinking water quality and water related infrastructure to protect public health with a focus on economically disadvantaged communities Objective 9 - Protect groundwater resources from over-drafting and contamination	
GOAL 5: CLIMATE ADAPTATION & ENERGY INDEPENDENCE Objective 10 - Assess climate change effects, impacts, vulnerabilities, and strategies for local and regional sectors Objective 11 - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation	
GOAL 6: PUBLIC SAFETY Objective 12 - Improve flood protection and reduce flood risk in support of public safety	
Eligible Project Type under 2015 IRWM Grant Solicitation [select all that apply] Water supply reliability, water conservation, and water use efficiency Stormwater capture, storage, clean-up, treatment, and management Removal of invasive non-native species, the creation and enhancement of wetlands, and the acquisition, protection, and restoration of open space and watershed lands Non-point source pollution reduction, management, and monitoring Groundwater recharge and management projects Contaminant and salt removal through reclamation, desalting, and other treatment technologies and conveyance of reclaimed water for distribution to users Water banking, exchange, reclamation, and improvement of water quality Non-point source pollution reduction, management, and monitoring Planning and implementation of multipurpose flood management programs Watershed protection and management Drinking water treatment and distribution Ecosystem and fisheries restoration and protection	k

3. Water Conservation Law Compliance

2.

[Compliance with Water Conservation Laws link:

http://www.water.ca.gov/wateruseefficiency/finance]

California Statewide Groundwater Elevation Monitoring (CASGEM)

a) What is the priority of the project's groundwater basin(s)? [Refer to the CASGEM Basin Prioritization http://www.water.ca.gov/groundwater/casgem/basin prioritization.cfm]

	high medium low very low						
b)	If the project's groundwater basin(s) is considered to be a high or medium priority, has a monitoring						
	entity been established for the relevant basin(s)?						
	yes no						
c)	Please list this entity and any additional information as needed:						
_							
	oundwater Management Plan (GWMP)						
a)	Will the proposed project directly affect groundwater levels or quality?						
ıf V	yes no es, the organization is required to be GWMP compliant in accordance with CWC §10753. Please note						
	t projects located in a high or medium priority groundwater basin without an adopted GWMP before						
	uary 1, 2015 are not eligible for funding unless the project sponsor's service area falls completely						
wit	hin an economically disadvantaged area. Indicate how the project proponent is or will be compliant:						
b)	The organization has prepared and implemented a GWMP consistent with CWC §10753. Provide						
	the GWMP in your application materials or provide a hyperlink to the Plan here. $\mathrm{N/A}$						
c)	The organization participates or consents to be subject to a GWMP, or a basin-wide management						
	plan that meets the requirements of CWC §10753. Provide the GWMP in your application materials or						
-11	provide a hyperlink to the Plan here. N/A						
d)	The organization conforms to the requirements of an adjudication of water rights in the subject groundwater basin						
e)	The project is located in a low or very low priority groundwater basin and the proposal includes						
۲)	the development of a GWMP that meets the requirements of CWC §10753 to be completed within 1-						
	year of the grant application submittal date.						
f)	Additional information as needed: This request is to determine the best way to move forward to						
•	improve water conservation and delivery in Caspar. Since Caspar extracts all of its water from						
	wells, a GWMP will be developed as part of the feasibility study and the community moves						
	forward to implement an actual project.						
l leb	oan Water Management Dan						
a)	oan Water Management Plan Is your organization required to file an Urban Water Management Plan (UWMP)?						
aj	yes no						
	[Definition of entity that is required to file an UWMP with DWR: water supplier of more than 3,000						
	customers or supplying more than 3000 acre-feet annually].						
b)	If Yes, list the date the UWMP was approved by DWR: N/A						
c)	Is your UWMP in compliance with AB 1420 requirements?						
	yes no						
d)	Does the urban water supplier meet the water meter requirements of CWC 525?						
	yes no						
	to the collection Advanced Disco						
	cicultural Water Management Plan						
a)	Is your organization – or any organization that will receive funding from the project – required to file an Agricultural Water Management Plan (AWMP)?						
	yes no						
	[Definition of an agricultural water supplier: a water supplier, either publicly or privately owned,						
	providing water to 10,000 or more irrigated acres, excluding the acreage that receives recycled water.						
	This includes a supplier or contractor for water regardless of the basis of right that distributes or sells						
	water for ultimate resale to customers.]						

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b)	If Yes, list date the AWMP was approved by DWR: Description
c)	Does the agricultural water supplier(s) meet the requirements in CWC Part 2.55 Division 6?
	yes no
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Sur	face Water Diversion Reports
a)	Is your organization required to file surface water diversion reports per the requirements in CWC Part
	5.1 Division 2?
	yes no
b)	If Yes, list date the surface water diversion report was submitted to DWR:

C. Project Information

1. Project Name: Caspar Community Water Project

2. Project Description

The project summary should include a problem statement, the major components of the project and the intended purpose of the project. [3000 characters max.]

Caspar's residents are served by a combination of privately owned wells, with insufficient year-round water security, and a private minimally maintained village water system with failing infrastructure. The village system originally supplied more than 50 homes and businesses in the village. The water system and several associated parcels have been for sale for 25 years, and the failing water system has proven to be a stumbling block in the sale.

In a series of charettes, conferences, and community meetings dating back to 1991, and with hired foundation-funded help from the UC Berkeley Landscape Architecture department, Caspar's residents recognize that controlling the water is a key to shaping the village's future.

Consequently, the Caspar Community (CC) Board of Directors is seeking support to assume the task of providing safe and secure potable water to the Community Center and Caspar village's core by upgrading and extending the system back to its original scope, potentially serving all of the insecure water hookups in the village.

The village system consists of three wells and distribution piping that serves, at present, a dozen parcels in central Caspar, including the Community Center that serves several thousand people over the course of each month. As it has done with renovations to the old schoolhouse that is now the Community Center, CC intends to apply best resiliency practices to the renovation of the system, thereby enhancing the quality of all life contiguous with the system in keeping with CC's mission.

3. Specific Project Goals/Objectives

[for each goal list specific objectives]

Goal 1: Water security [100 characters max.]

Goal 1 Objective: Conduct necessary exploration to establish existing system capacity [200 characters max.]

characters max.

Goal 1 Objective: Establish baseline upgrades necessary to comply with water quality regulations

[200 characters max.]

Goal 1 Objective: Network with neighboring communities experiencing water scarcity [200

characters max.]

Goal 1 Objective: [200 characters max.]

Goal 2: Plan for water security

Goal 2 Objective: Confirm feasibility and engage cooperating ratepayers

Goal 2 Objective: Determine water supply needs of included and adjacent parcels

Goal 2 Objective: Assuming capacity exists, study neighboring water scarcity patterns and evaluate

extension feasibility

Goal 2 Objective: Collaborate with County Transit and Planning to determine best possible sites and right-of-ways for new distribution system

Goal 3: Prepare proposals for Permitting and Implementation if project is shown to be feasible

Goal 3 Objective: Move to acquire land associated with existing water system

Goal 3 Objective: Assemble pre-permitting documentation to facilitate next phase

	Goal 3 Objective:
	Goal 3 Objective:
	ditional Goals & Objectives (List) □□□
4.	Describe the need for the project. [1000 characters max.] Caspar is a small rural community completely dependent on its own ground water mostly extracted from shallow wells. Central Caspar, including residences on small parcels, the Community Center, and a number of small businesses, is served by a minimally maintained, aging system of three wells, storage tanks, and a cobbled-together, fragile combination of pipes. Anecdotal evidence suggests that a significant amount of water is lost through leakage. Water quality is not monitored. Some local wells have gone dry in the last two years while others are less affected. This community works well together to care for the land and each other. The wells and the delivery system sit on land that an absentee property owner is eager to sell. Caspar Community's Board believes that the best way to achieve water security is for the community to rebuild the system and to either own the property or to place it under an agreement that protects water security, now based only on historical use.
5.	Describe how your project addresses the North Coast Resource Partnership and North Coast IRWM Plan Goals and Objectives selected [1000 characters max.] Caspar Community (CC) has a track record of projects that benefit Caspar residents, restore and protect the natural resources of its ocean bluff location, and work toward resilience. CC has formed partnerships with the Trust for Public Land, State Parks, and USDA, CalTrans, and others to accomplish its goals. "Casparados" deliberate, plan, and work to protect individuals and the community as a whole, and
	the CC's successes make it clear that the community is determined to take responsibility for its own future. (see CasparCommons.org/fest/findings.php) This proposed feasibility study will consider all of the IRWM objectives as it develops an infrastucture plan to ensure water security for greater Caspar. Caspar Community's goals and practices demonstrate that residents take climate change seriously. CC demonstrated its commitment to energy independence and GHG emission reduction by renovating and solarizing its Community Center. CC's next step: water security.
6.	List the impaired water bodies (303d listing) that your project benefits: [500 character max.] [for more information, see $\underline{\text{map}}$ and $\underline{\text{SWRCB}}$] N/A
7.	Will this project mitigate an existing or potential Cease and Desist Order or other regulatory compliance enforcement action? yes no If so, please describe? [500 characters max.]
8.	Describe the population served by this project. [500 characters max.]

Caspar is a census-designated place in Mendocino County, California. It is located on the Pacific Ocean 4 miles north of Mendocino. The Caspar population in 2013 was 460 people. 88.3% are Caucasian; 9.1% are Native American. The median income of Caspar Residents is \$39,833. 19.6% of Caspar residents live in poverty. The median age is 45.4. Caspar is a close-knit community with

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a successful history of asserting autonomy, self-governance, and progress through consensus building.

9.	Is this project located in a Disadvantaged Community?	see North	Coast map
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EntirelyPartially

No

List the Disadvantaged Community(s)

Caspar, CA 95420

10. Describe how your project directly benefits the Economically Disadvantaged Communities it serves. [500 character max.]

This project will establish the feasibility of the community of Caspar owning its water and thereby guaranteeing water security for its residents. Formerly a "company town", Caspar's village core, consisting of many of Caspar's smallest and least expensive properties, gets its water from a privately owned system originally built by "the company" that terminated operations in 1955. The residents and visitors of Caspar deserve to be guaranteed a secure source of potable water.

11. Describe local and/or political support for this project. [500 characters max.]

The Water Project has been a priority as determined by a number of consensus-building Community Meetings, the most recent in February 2015. The Caspar Community Board of Directors and County Supervisor Dan Gjerde support the project. Tiny (but mighty) Caspar is remarkable in its ability to achieve consensus and achieve its goals.

12. List all collaborating partners and agencies and nature of collaboration. [1000 characters max.] The goal of this study is to identify potential collaborators and what they will bring to the table when the project moves into its design and implementation stage.

Caspar has established and maintains a highly cooperative relationship with the Coastal Commission and the Mendocino County Planning Department. Several companies (PG&E, AT&T, and Comcast) are involved in an undergrounding project that can include rerouting water pipes.

By sponsoring conferences in small settlement resilience, Caspar has built relationships with a wide inventory of high level professional expertise including biology, botany, engineering, hydrology, legal, and financial skills and experience who are eager to help Caspar achieve its goals and serve as a model for other small communities. Caspar residents are enthusiastic, talented, persistent volunteers who will be engaged in this feasibility study, as well as the infrastructure project that will likely result from a successful study.

13. Is this project part or a phase of a larger project? Are there similar efforts being made by other groups? If so, please describe? [500 characters max.]

This is the initial phase of the upgrading and restoration of Caspar's village water delivery system. We intend to develop plans for a compliant modern water treatment plant and distribution system, and for its funding and ongoing management under community ownership. Numerous small communities in California depend on privately owned well access to ground water rather than urban management of water. We anticipate that solutions found in this study could be replicated elsewhere.

14. Describe the kind of notification, outreach and collaboration that has been done with the County(ies) and/or Tribes within the proposed project impact area: Note that selected projects may be requested to

submit documentation of notification or land owner access for the appropriate jurisdiction of the proposed project impact area. [500 characters max.]

Caspar Community works closely with Mendocino County, and has consulted extensively with agents for the landowner prior to and during the preparation of this proposal. Caspar Community carefully coordinates the efforts of its residents to solve common problems through its newsletter, community meetings, and fund- and fun-raising activities. Through neighborhood gatherings, we have developed an efficient and representative form of informal, inclusive, consensual governance.

15. Project Information Notes:

D. Drought Preparedness

1. Drought Project Elements

Indicate which elements will be achieved by the project [select all that apply]:

Promote water conservation, conjunctive use, reuse and recycling
Improve landscape and agricultural irrigation efficiencies
Achieve long term reduction of water use
Efficient groundwater basin management
Establish system interties

2. Describe the water management impacts in the project area due to the current drought. [1000 characters max.]

Decrepitude of the thrice-repiped, disintegrating village water system is our principal concern under the current drought, is the. Leakage is estimated at 25% and increasing. Outages due to major leaks are common, leaving the village dry and at risk for fire. Hydrants were removed from the system in the 1990s. Water service to small parcels along the system and parcels on its periphery could be restored to historical (1955) levels, reducing groundwater stress and the threat of pollution to existing shallow wells. Heroic community efforts to manage water are proving insufficient to ensure water security. Intense chemical treatment of existing system water due to extensive leakage may be detrimental to user health while poisoning ground water. Fertile fields and home plots are severely curtailed. Uninhabited parcels associated with the water system are neglected and over-run with invasives that consume water, affect groundwater purity, and, due to drought, exacerbating the fire hazard.

3. Describe how the project contributes to sustainable water supply and reliability during water shortages and effectively addresses long-term drought preparedness. [1000 characters max.]

While the feasibility study itself will contribute to sustainable water supply only by raising conservation awareness, and providing education and support for graywater untilization, the goal is to find the way to achieve long-term resilience despite worsening drought. Caspar is isolated from any urban source of water except by the trucking water from afar, and sources near enough to be economically viable are facing shortages of their own. Caspar is fortunate to have abundant water in the system's wells. This project is attuned to an expectation that Global Weirding will manifest in Caspar as increased summertime drought. By reducing losses to leakage, improving efficiency, increasing reliance on renewable energy, and uniting the community in water

stewardship, we expect that this project will address long-term drought preparedness in innovative and replicable ways.

4. Drought Preparedness Notes:

Caspar residents began preparing for the drought in 1990, when the "Company" sold its holdings to speculators. Understanding water and land to be controlling factors in its inevitable development, conferences, gatherings, and charettes that have involved many coastal residents have activated ongoing community concern. A 2014 Sustainability Conference (see CasparCommons.org/fest/findings.php) focused on six topics, first among them being water. Since then, the Caspar Community has sponsored graywater workshops and organized neighborhood meetings on water sharing and conservation. As a result of this long-term program, Caspar residents are unusually aware of, and protective of, their "water commons." A questionnaire broadly circulated in the community reflected the willingness of most residents to share water in case a neighboring well failed.

E. Project Location

1. Describe the location of the project

Geographical Information (latitude and longitude in degrees, minutes, and seconds): $39^{\circ}21'29.93"$ N $123^{\circ}48'48.11"$ W

2. Site Address (if relevant):

Caspar Community Center, 15051 Caspar Road, Caspar, CA 95420

F. Project Tasks, Budget and Schedule

1. Major Tasks, Schedule and Budget for NCRP 2015 IRWM Project Solicitation

Please complete MS Excel table available at

http://www.northcoastresourcepartnership.org/app_pages/view/7972; see instructions for submitting the required excel document with the application materials.

2.	Current Project Phase:		
	Feasibility Study		
	Planning		
	Environmental Documentation & CEQA		
	Permitting		
	Implementation / Construction		
	Maintenance		
	Monitoring		
	Other: <u></u>		

3. Projected Project Start Date: 1/1/15

4. Anticipated Project End Date: 9/1/17

5. Project Schedule & Readiness

On what date will the project be ready to proceed to construction/implementation? [For construction projects,"ready to proceed" means that construction bids have been awarded by the specified date.] This proposal is meant to precede construction/implementation, to establish feasibility and community capacity to assume management of its own water supply.

5.	What level of CEQA does your project require?
	Please note that because this solicitation is for state funding, CEQA will be required. Select the type of
	documentation:
	Initial Study
	Environmental Impact Report (EIR)
	Environmental Impact Statement (NEPA/Federal involvement)
	Mitigated Negative Declaration
	Negative Declaration
	Environmental Assessment
	<u>Exempt</u>
	N/A - not a CEQA Project
	Date or anticipated data for CEQA compliance:
	State Clearinghouse Number:
6.	Are other permits required for this project? yes no If yes, please list: Building Permits: Mendocino County Department of Building & Planning Encroachment Permits: Mendocino County Department of Transportation Greywater Permits: Mendocino County Department of Environmental Health Coastal Permit(s): California Coastal Commission
7.	Describe the financial need for the project (i.e. describe why the project cannot be completed with the existing financial resources of the project proponent, landowner and/or beneficiary). [1000 characters max.] The present system is in an advanced condition of decay. Its owner has generally reduced service
	from the existing system whenever a parcel is sold, imposing a severe hardship on residents and stressing local groundwater levels. Caspar Community's ability to raise sufficient funds for this project is limited by its responsibilities to its larger community, even though the Community Center's deeded access to water will be threatened if (when) the system fails. Nonetheless, this project is recognized as critically important to members of the community, many of whom are disadvantaged, particularly in the village core. Water is presently over-chlorinated to compensate for the system's exposure to leakage into the system along the failing pipes. The Community has expressed a clear consensus that its autonomy could be negatively affected should the water system be sold adversely by its present owner.
8.	Is the project budget scalable? yes no

Describe how a scaled budget would impact the overall project. [500 characters max.]

Scaled back by 25%, this project could proceed, but planning for mitigation, invasive plant abatement, and system extension would be curtailed. Scaling the project by 50% would render the project impracticable.

9 Describe the basis for the costs used to derive the project budget according to each budget category. Include the source of the unit cost estimates used. Also, explain any costs that are higher than the average market value. If labor costs are higher than those required by prevailing wage, explain why and what those labor costs are based on. [500 characters max.]

Costs in budget are estimates provided in consultation with local experts who will work with us to accomplish our goals. These estimates are based on their standard or "local" rates, and therefore are likely well below statewide prevailing rates for equal services. Caspar Community prefers local competent experts instead of experts from afar, thereby reducing overall costs.

9. List the sources of non-state matching funds, amounts and indicate their status (i.e. not applied for, pending, received and the date of receipt).

Caspar Community has been advised that it is exempt from matching due to its disadvantaged community status. The greater project will most likely involve funding from other sources for parts of the project not directly associated with the water system.

List the sources and amount of state matchir	g funds (these are not eligible matching f	funds).
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N/A

11. Project Tasks, Budget and Schedule Notes:

G. Justification & Technical Basis of Project

1. List any studies, plans and designs completed for the project. *Please the instructions for more information about submitting these documents with the final application.*

The primary purpose of this proposal is to establish the technical and fiscal parameters under which acquisition and ongoing operation of the existing Caspar village water system is feasible.

2.	Is this project integrated into existing local, watershed, basin/regional plans or reports?
	yes no

If so, please list plans or reports [list format: Document name, Author, Published date]:

3. Summarize the projected physical benefits and outcomes of the project:

Water Supply & Conservation

- a) Quantity and type of new storage or delivery infrastructure built [200 characters max.]: N/A
- b) Number and type of water users provided with water [200 characters max.]: N/A
- c) Acre-feet of water leased/purchased: N/A
- d) Quantity and type of stormwater capture infrastructure built [200 characters max.]: N/A
- e) Quantity and type of grey/reclaimed water infrastructure built [200 characters max.]: N/A
- f) Other water supply and/or conservation measure completed include quantity: N/A

Water Quality

- a) Water and/or wastewater treatment projects
 - i. Quantity and type of water treatment infrastructure built or installed: N/A
 - ii. Quantity and type of upgrades/replacements to water treatment infrastructure: N/A
 - iii. Other water and/or wastewater water quality improvements include quantity: N/A
- b) Quantity and type of road related water quality improvements [200 characters max.]: N/A
- c) For improvements that are not road related, number and type of watershed erosion and sediment control treatments completed [200 characters max.]: N/A
- d) Number and type of other water quality improvements [200 characters max.]: N/A

Watershed Rehabilitation & Habitat Improvement

- a) Quantity and type of instream habitat improvements [200 characters max.]: N/A
- b) Quantity and type of vegetation improvements [200 characters max.]: N/A
- c) Quantity and type of fish passage improvements [200 characters max.]: N/A
- d) Other watershed or habitat improvements include quantity [200 characters max.]: N/A

Flood Management

- a) Quantity and type of new infrastructure built [200 characters max.]: N/A
- b) Other flood management measure completed include quantity [200 characters max.]: $\underline{\mathbb{N}}N/A$

Energy independence & Climate Change

- a) Quantity and type of new infrastructure built [200 characters max.]: N/A
- b) Other energy independence and/or climate change measure completed include quantity: N/A

Other Work or Outcomes (not captured above)

- a) New infrastructure built and quantity [200 characters max.]: N/A
- b) Briefly describe outreach proposed including the number of landowners targeted and number of events [200 characters max.]: One landowner owns the wells and infrastructure that supply Caspar's village core with water. Outreach is one-on-one and on-going. Several investors, plus the Caspar Community, plan to organize and participate in purchase of the necessary parcels.
- c) Briefly describe any other type of specific work proposed including quantities: N/A
- 4. List all new facilities, policies, and actions required to obtain the physical benefits. [500 characters max.] The present proposal does not extend to facilities. Instead, it will attempt to establish what facilities will be needed. Caspar Community, Inc. has already begun setting policies for equitable distribution of water. If granted, the funding from this proposal will be used to establish the nature of the management of the water as well as the technical necessities for its safe treatment and delivery, and the potential for extension of service to neighboring parcels.
- 5. Describe any potential adverse physical effects and what is being done to mitigate these impacts. If none, explain. [1000 characters max.] N/A
- 6. Explain the scientific and technical basis for your project; describe the methods used to estimate the physical benefits above. [2000 characters max.]
 - As part of this phase of the project, we will attempt to establish the capacity of the present wells, limitations of the aquifer, and the needs of users and their capacity to pay for water. Our

methodology will be to employ experts in these fields: engineering geologists, ground-water hydrologists, renewable energy experts, land-use planners, and others with established credentials in relevant fields.

7. Describe how the performance of the project will be monitored.

Include what targets and methods will be used to monitor the project's ability to achieve the benefits claimed and how performance will be assessed: [1000 characters max.]

The goal of this proposal is straightforward: establish whether Caspar Community or a nonprofit spin-off could reasonably acquire, upgrade, and operate the existing water system. If at any point during the project it becomes clear that the project is not feasible, it will terminate. At the end of this project, a determination will be made by the Caspar Community Board how to proceed, based on the findings of this phase of the project.

Undertaking a project of this scope is ambitious for a small unincorporated Caspar-sized village, even one that has demonstrated extraordinary capacity in recent years. Any definition of a path to success, or even the determination that this project is not feasible, is a success. Nevertheless, transparency and close time-line monitoring of the project will be integral to its execution.

8. Describe how your project benefits salmonids and other endangered/threatened species. [500 character max.]

Heedless development and leakage in the water delivery system have allowed invasive plant communities to drive out native species and reduced runoff to Caspar Creek, a Coho stream. Attention will be paid to restoring clean stormwater run-off.

9. Describe how your project addresses climate change adaptation and mitigation: energy efficiency, reduction of greenhouse gas emissions, reduction of carbon, or reduction in water demand. [500 character max.]

Implementation of this project will substantially reduce "elsewhere emission" electricity use by new water users brought into the system, as this is a gravity fed system, and upgrade plans include renewably powered pumping and treatment equipment. Existing and future leaks will be reduced or eliminated. Invasive thickets will be replaced by thriftier native vegetation more appropriate to native lifeforms, and enabling existing flora to thrive.

10. For each of the Potential Benefits that your project claims complete the following table to describe an estimate of the benefits expected to result from the proposed project. [See the NCRP Project Application Instructions, Potential Project Benefits Worksheet and background information to help complete the table. Attachment B includes additional guidance, source materials and examples from North Coast projects.]

PROJECT BENEFITS TABLE

Potential Benefits Description	Physical Amt of	Physical Units	Est. Economic Value	Economic		
[200 character max.]	Benefit	,	per year	Units		
Water Supply	Water Supply					
Water Quality	Water Quality					

Potential Benefits Description [200 character max.]	Physical Amt of Benefit	Physical Units	Est. Economic Value per year	Economic Units
Other Ecosystem Service Benefits				
Community and Social Benefits				
Other Benefits				
The primary goal of the feasibility study is to identify and quantify physical and economic benefits of rebuilding the Caspar water system.				

11. Alternative Methods to Achieve Benefits

a) Have alternative methods been identified to achieve the same types and amounts of physical benefits as the proposed project? If yes, describe the alternative methods and estimated costs of the alternative(s). If a study of alternatives has been completed, please attach this information and note that this information is included in the application. [1000 character max.]

"Taking no action" is the prevailing alternative. Caspar Community Center, as well as several of the properties presently served by the existing system, have, or could have, wells. System wells are located in areas with good access to the aquifer, and at a distance from surrounding parcels, thereby distributing water withdrawal and reducing cross-pollution from septage. Continuing reduction of the existing system's service shifts water extraction into more densely populated areas, risking depression of the water table and pollution of shallow wells from septage.

If the existing system serves fewer and fewer parcels without significant upgrade, water lost to leaks will increase and negatively impact water availability in the community.

The cost of individual wells and treatment systems on nine parcels would exceed expected costs for implementation of upgrading the existing systems, and would not offer the option of system extension.

- b) If no, please explain why alternative methods should not be considered. [500 character max.] N/A
- c) If alternative methods have not yet been considered, but at least one alternative method exists to achieve the same types of physical benefits, please describe that alternative and why it was not considered. [500 character max.]
 - Allowing an adverse sale remains a likely and major threat to the community. The system owner barely maintains the system in hope of a sale, and continues to reduce its service selling off parcels without water service. One of the present wells is used to export water, demonstrably impacting wells in the community. Caspar Community believes that a more equitable, locally beneficial solution is needed.

- d) Is the proposed project the least cost alternative to achieve the physical benefits? If so, please provide supporting information. [500 character max.] N/A
- e) If the proposed project is not the least cost alternative, why is it the preferred alternative? Provide an explanation of any accomplishments of the proposed project that are different from the alternative project or methods. [500 character max.] N/A

12. Project Justification & Technical Basis Notes:

Caspar Community has made a practice of retaining competent local expertise wherever possible, believing that by so doing, our successful projects demonstrate local capabilities to execute ambitious plans. In the preparation of this proposal, we have been gratified to encounter enthusiasm as well as confidence that project goals can be met by local practitioners.

H. **Other Project Data**

1.	Select the other sensitive habitat areas your project	23. Decreased reliance on imported water	
	benefits [select all that apply]:	24. Keduced groundwater overdraft	
		25. Creation of wetlands and riparian habitat	
	2. Riparian corridors	26. Decreased operational costs	
	3. Perennial and intermittent streams	27. Other <u></u>	
	4. Wetlands	28.	
	5. A Lakes and ponds and adjacent shore habitat	29. Water Quality Improvement	
	6. Marine habitats	30. Increased water supply	
	7. Coastal tide lands and marshes	31. Improved aquatic and wetland species	
	8. Coastal and offshore areas containing	habitat and populations	
	breeding or nesting sites	32. Increased cropland production	
	9. Native grassland	33. Creation of wetlands and riparian habitat	
	10. Serpentine chaparral/grassland	34. Improved recreation opportunities	
	11. Cypress woodland	35. Decreased treatment costs	
	12. Oak woodland	36. Other <u></u>	
	13. Redwood forest	37.	
	14. Areas used for ecological scientific study and	38. Groundwater Improvements	
	research	39. Improved flood protection	
	15. Existing wildlife refuges and reserves	40. Decreased reliance on imported water	
	16. Habitats supporting rare, endangered,	41. Reduced surface water use, reduced	
	threatened and endemic species (CNPS, State,	pumping costs	
	Federal)	42. Decreased or prevention of groundwater	
	17.	overdraft	
18.	Project Benefits [select all that apply]	43. Other <u></u>	
	19. Increase Water Supply	44.	
	20. Increased water supply or range in water	45. Water Conservation and Reuse	
	supply (i.e. acre-feet per year)	46. Increased water saving	
	21. Improved water quality	47. Efficient reuse of wastewater	
	22. Increased recreational opportunities		

48. Costs savings from reduced purchases of	61. Habitat Improvement		
imported water	62. Reduced surface water nutrient and bacteria		
49. Saving construction of water storage facilities	concentrations (improved water supply quality)		
50. Increased nutrient levels for plant and crop	63. Enhanced fish habitat		
use from use of reclaimed wastewater	64. Increased opportunities for recreational		
51. Other	hunting and viewing		
52.	65. Nincreased numbers of native species		
53. Watershed Rehabilitation	66. Reduced flood risks		
54. Long-term sediment reduction and	67. Education opportunities		
temperature improvements	68. Other <u></u>		
55. Reduced surface water nutrient and bacteria	69.		
concentrations (improved water supply quality)	70. Flood Management		
56. Minproved fish and wildlife habitat and	71. Nncreased aquifer recharge		
passage	72. Runoff reduction		
57. Enhanced public safety and recreational	73. Improved surface water quality		
opportunities	74. Natural resources preservation and		
58. Instream rehabilitation to redress	restoration		
hydromodification	75. Reduced risk to life and property		
59. Other <u></u>	76. Decreased flood insurance costs		
60.	77. Other <u></u>		
78.			
79. Select the Areas of Biological Significance (ASBS), N	larine Protected Areas (MPA) and Critical Coastal		
Areas (CCA) that your project benefits [select all tha	at apply; see North Coast map for more information]:		
80.			
81. Critical Coastal Area:	83. California Marine Protected Area:		
Klamath River	Punta Gorda		
Redwood Creek	MacKerricher		
Redwood National Park	Point Cabrillo		
Trinidad Head	Russian Gulch		
Mad River	Van Damme		
• Eel River	Manchester and Arena Rock		
Mattole River	Del Mar Landing		
King Range	Salt Point		
Pudding Creek	Gerstle Cove		
Noyo River	Fort Ross		
Jughandle Cove	Sonoma Coast		
Big River	Bodega		
Albion River	84.		
Navarro River	85. Areas of Special Biological Significance:		
Garcia River	Bodega Marine Life Refuge		
Saunders Reef	Del Mar Landing Ecological Reserve		
Del Mar Landing	Gerstle Cove		
	Kelp Beds at Saunders Reef		
• Gerstle Cove			
Estero Americano	Kelp Beds at Trinidad Head Kinga Bagga National Consequence		
• Estero de San Antonio	Kings Range National Conservation Area		
82.	Pygmy Forest Ecological Staircase		
	Redwood National and State Parks		

86.

87. Statewide Priorities

88. [select all that apply; for more information see <u>IRWM Program Guidelines</u>]

89. Dro	ught Preparedness				
90. X					
91. 🔀 I					
92. X					
93. 🔀 E	Efficient groundwater basin management				
94. 🔀 9	System interties				
95.					
96. Use	and Reuse Water More Efficiently				
97.	ncrease urban and agricultural water use efficiency measures such as conservation and recycling				
	Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground				
	peneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or				
sumps do	ownhill of development				
99. 🔙 I	incorporate and implement low impact development (LID) design features, techniques, and practices to reduce				
or elimin	ate stormwater runoff				
100.					
<i>101</i> .	Climate Change Response Actions				
102.	Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply				
sources					
103.	Adaptation to Climate Change: Use and reuse water more efficiently				
104.	Adaptation to Climate Change: Water management system modifications that address anticipated				
	change impacts				
105.	Adaptation to Climate Change: Establish and enhance migration corridors, re-establish river-floodplain				
	ic continuity, re-introduce anadromous fish populations to upper watersheds, and enhance upper watershed				
106.	nd meadow systems Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses				
100. 107.	Reduction of Greenhouse Gas (GHG) Emissions: Needuce energy consumption of water systems and uses Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water				
107.					
109.	Reduce Energy Consumption: Water use efficiency Reduce Energy Consumption: Water recycling				
109. 110.	Reduce Energy Consumption: Water recycling Reduce Energy Consumption: Water system energy efficiency				
111.	Reduce Energy Consumption: Water system energy emclency Reduce Energy Consumption: Reuse runoff				
112.	Reduce Ellergy Collsumption. Rease ranon				
112. 113.	Expand Environmental Stewardship				
113. 114.	Expand Environmental Stewardship to protect and enhance the environment by improving watershed,				
	n, and instream functions and to sustain water and flood management ecosystems.				
115.	ii, and instream functions and to sustain water and nood management ecosystems.				
116.	Practice Integrated Flood Management				
117.	Better emergency preparedness and response				
118.	Improved flood protection				
119.	More sustainable flood and water management systems				
119. 120.	Enhanced floodplain ecosystems				
120. 121.	LID techniques that store and infiltrate runoff while protecting groundwater				
121. 122.	Lib teeningues that store and ininitiate runon while protecting groundwater				
122. 123.	Protect Surface Water and Groundwater Quality				
123. 124.	Protecting and restoring surface water and groundwater quality to safeguard public and environmental				
	nd secure water supplies for beneficial uses				

I.

125.	Salt/nutrient management planning as a components of an IRWM Plan			
126.				
<i>127.</i>	Improve Tribal Water and Natural Resources			
128.	Improve Tribal Water and Natural Resources and include the development of Tribal consultation,			
collabora	collaboration, and access to funding for water programs			
129.				
<i>130.</i>	Ensure Equitable Distribution of Benefits			
131.	Increase the participation of small and disadvantaged communities in the IRWM process.			
132.	Develop multi-benefit projects with consideration of affected disadvantaged communities and			
vulnerabl	vulnerable populations.			
133.	Address safe drinking water and wastewater treatment needs of DACs.			
134.	Address critical water supply or water quality needs of California Native American Tribes within the			
region.				
135.				
136.				
137. Other Project Data Notes:				
138.				

139.

140.